FINAL MEETING SUMMARY

HANFORD ADVISORY BOARD
RIVER AND PLATEAU COMMITTEE MEETING
December 6, 2004
Richland, WA

Topics in this Meeting Summary

This is only a summary of issues and actions in this meeting. It may not represent the fullness of ideas discussed or opinions given, and should not be used as a substitute for actual public involvement or public comment on any particular topic unless specifically identified as such.

Welcome and Introductions

Pam Larson, committee chair, welcomed committee members and introductions were made. The August meeting summary was approved with edits. Pam referred the committee to an e-mail from John Price, Ecology, regarding the Groundwater Protection Project's standing open groundwater meeting. John encouraged committee members to attend since Fluor is thinking of closing down the meetings due to a lack of attendance.

Engineering Evaluations/Cost Estimates (EE/CA), Proposed Plans, Record of Decision (ROD) amendments and other decision drivers

Pam provided the committee with a brief introduction to EE/CAs. She indicated that there are several EE/CAs and other decision documents currently in the works and that the River and Plateau Committee (RAP) needs to decide how to deal with EE/CAs. In addition, she asked the committee what role the HAB can play?

Cliff Clark, Department of Energy-Richland Operations Office (DOE-RL), presented an overview of EE/CAs, including the processes associated with EE/CAs, when they are used, and the type of information they should contain. The Department of Energy (DOE) uses EE/CAs primarily for decommission and demolition (D&D) of buildings on-site that are not formally covered under the Tri Party Agreement (TPA). In 1995, the Environmental Protection Agency (EPA) and DOE developed a policy to perform D&D under the Comprehensive Environmental Response, Compensation and Liability Act

(CERCLA). In the EE/CA process a contractor prepares the EE/CA reports. The EE/CA reports are then sent to DOE for review. After DOE approval and regulatory review and agreement, EE/CAs are made available to the public. Once public comments are collected, responses are made through a joint, three-agency (EPA, Ecology, and DOE) effort. With agreement on the EE/CA, the process moves forward with the drafting of an action memorandum, and then work is ready to proceed. Cliff said that the formal place for public review and comment is not the only place where the RAP committee can impact the process, so it is important to determine how and where RAP can provide meaningful input.

In the typical TPA process, the public does not get to comment on the proposed action until the end of the process. Holding a public comment period is not required, so after several years with no one commenting, the public comment period was dropped in 1996 due to lack of attendance. Cliff referred everyone to Step 7 and Step 8 (in the *Section 2 – Hanford Decision Process* handout), which is where the public currently starts to see information on plans.

The nine CERCLA criteria (see handout) that are always used for proposed plans are typically used for EE/CAs too, however sometimes only three criteria are used.

Regulator Perspectives

Dennis Faulk, EPA, underlined the significance of EE/CAs, suggesting that they are just as important as the proposed plans that EPA does. EE/CAs are similar to proposed plans, but the options/alternatives are relatively limited as compared to the proposed plan. Dennis also emphasized that when dealing with EE/CAs one has to be sure that the proposed removal actions are consistent with what you think the final action will be. EPA entered into a joint process with DOE because it provides EPA with input and a role in the process. EPA must approve DOE sampling and analysis plans.

Rick Bond, Washington State Department of Ecology (Ecology), explained that people are always able to comment on EE/CAs, but that they should use common sense when making such comments, since a lot of data and work has already been done that makes the action that is selected pretty obvious.

Committee Discussion

- *Pam asked if the EE/CA is out on the Plutonium Finishing Plant (PFP) yet?* That EE/CA is closed already.
- *Dick Smith asked if DOE puts out a formal response to every comment that it receives?* He said that he has provided several comments and has not received any response to date. A response is issued to every comment and responses to his comments should be coming if they have not been received yet.
- *Tom Stoops asked if EE/CA comments go into the administrative record?* Cliff responded that all comments are made part of the administrative record, but that

EE/CAs do not get changed as a result of public comment. Rather, action changes are typically made in action memorandums.

- *Susan Leckband asked if the cost analysis in EE/CAs is cost-benefit analysis and is it done based on the nine CERCLA criteria? Also, what is the cost threshold?* Cliff said that the cost analysis was based on cost-benefit analysis. Dennis commented that such analysis is not cost-benefit analysis in the purest sense, since it is really just a cost figure for a proposed action. EE/CAs are usually only held to three criteria, even though they may be evaluated by all nine of the criteria.
- *Greg de Bruler commented that EE/CAs provide an evaluation on what costs of an action will be, but they do not actually indicate that work will be done. An EE/CA provides the costs associated with possible actions.* Dennis agreed, saying that an EE/CA is the same as an action plan, serving as an implementability assessment of an action.
- Referring to the scope and timing of EE/CAs, Mike Goldstein, EPA, explained that the use of removal authority, action memos, and EE/CAs is a process that reflects agreement between the TPA agencies. He noted that decisions about soil and groundwater are made long before decisions about what to do with buildings. In general, EPA prefers not to do one big EE/CA without having commitment from DOE on various aspects throughout the process. When RAP receives an EE/CA for review, Ecology or EPA can be assumed to be on board. EE/CAs do not include irreversible and irretrievable commitments (I&I), but should include all in-building costs.
- *Some committee members expressed concern about a lack of detail within EE/CAs, especially regarding the overlap between agencies and who is responsible for what.* Dennis said that there is more detail in the removal action work plans that explain how the work will be done. This information does not appear in EE/CAs, but is used. Furthermore, EE/CAs do not have as much detail as feasibility studies partly because only a limited number of options are included in the document.
- *Wade Riggsbee asked whether EE/CAs will capture the pipelines as part of the costs for conducting building remediation?* Dennis stated that it is typically more effective for DOE to do a separate action plan for pipeline remediation.
- Pam mentioned that Dick has done a read-through of some EE/CAs, and Dick provided a summary to the committee of what he found. Dick said that his main critique is that all the analysis in the EE/CA seemed to stop at the surface, and he has not seen any plan to clean-up subsurface material; everything is taken at grade and capped. He is concerned that once the sites are capped, nothing will be done to work on remediation of the rest of the sites due to a lack of funding and planning. He said that taking things to grade improves the aesthetic aspects of the site, but does not deal with contamination issues associated with existing subsurface structures. Rick Bond replied that the EE/CA done for the PFP incorporates analysis of below-grade issues. For example, the most practical way to deal with the PFP area is to take everything to grade first and then deal with subsurface structures all at once. At this point, some temporary caps have been implemented, where all below-grade stuff will be dealt with by 2011.

- Dennis stated that issues relating to building site remediation cross agency boundaries, making an understanding of timing and the process important. Agencies need to know what information they are giving each other.
- *Maynard Plahuta asked if the agencies have looked at what makes the most sense in determining how to divide the 300 Area into separate EE/CAs?* He said that it is counterproductive to fill a site that you might likely have to dig up again later. Mike Goldstein responded that a boundary line has been set at Apple St. in the 300 Area. The work will be done starting in the north and moving inwards from there. Another EE/CA will be done to direct how to deal with remediation of building sites in the 300 Area.
- Pam said that public comments indicate that people feel that EE/CAs leave reviewers hanging, without an entire picture of the process. She suggested that EE/CAs could be more overt about including a bigger picture context and scope. Dennis said that this broader context is something that is supposed to be provided in an EE/CA.
- Rick Jansons said he was under the impression that EE/CAs represented the final action. Therefore, it would help to know that there are plans for dealing with additional aspects. Cliff responded that there are very few circumstances where EE/CAs will represent the final action.
- Committee members noted the need to refer to specific record of decisions (RODs) for each EE/CA, and suggested developing a boilerplate paragraph informing the public and others that there are other plans and further action beyond the EE/CA (i.e. a broader context in which EE/CAs fit).
- Penny Mabie, EnviroIssues, suggested that, based on the committee discussion, it seemed the committee might consider three questions when reviewing EE/CAs: 1) Does the proposed action pre-suppose or preclude any remedies? 2) Is the proposed action consistent with what final actions should be? 3) Does this action make sense now?
- Pam discussed EE/CA reviews with the committee and noted that Steve Chalk, DOE-RL, provided a list of upcoming EE/CAs. Susan commented that there are already committee members that examine EE/CAs, and that RAP should take advantage of that.
- Maynard suggested it might be more productive to have the RAP look at work plans in addition to EE/CAs that are determined to be significant.
- Pam informed the committee that the U-Facility proposed plan is the next important document to review. She suggested RAP take on reviewing the next two EE/CAs if issue managers can be found, evaluate the process, and determine how to proceed with future EE/CAs.
- Rick cautioned that the 30-day EE/CA comment period does not fit into the typical HAB process, which means that RAP would be looking at the issue retroactively. It would be best to have a proactive approach, but that means that the HAB will have problems providing comment. Pam said although the HAB might miss out on providing formal written comment, dealing with EE/CAs at Committee meetings will still provide input to regulators, which is useful. Rob asked if it is helpful for the

agencies to hear committee and board discussion? Dennis said that it would be helpful to have the people who actually write the documents hear the committee and board discussion, since that will have a more direct impact on the content of the documents.

- Using the U-Plant as an example, Dennis explained that EE/CAs do sometimes get the short end of the stick, and that the agencies should bring issues to RAP earlier in the process for comment. Concerning the public comment period, he suggested trying to time it with the HAB meeting schedule, since he feels that there is rarely a timing crunch where the HAB meeting schedule cannot be worked around.
- The committee decided to use the U Plant to approach reviewing EE/CAs and other documents, including a technical and policy level examination. Pam asked for volunteers to be issue managers for reviewing the next two EE/CAs. Issue managers review documents and compare it to board values. Susan and Shelley Cimon offered to do the policy analysis for the U Plant Proposed Plan review and Dick and Rob Davis offered to conduct the technical analysis.

Proposed Plan to Clean Up the 221-U Facility

Kevin Leary, DOE-RL, presented an overview of the Proposed Plan for the 221-U Facility to the committee, including discussion of the current status of the Proposed Plan, the alternatives being considered, CERCLA and stakeholder criteria, and the performance of the alternatives against the criteria. The Proposed Plan was issued on November 20, 2004, the public comment period is between December 13, 2004 and January 31, 2005, and the ROD is expected in April 2005. The preferred alternative is to partially collapse the structure with the existing legacy waste in place and install an engineered barrier. The alternatives being considered in the plan are: Alternative 1) full removal and disposal; Alternative 3) entombment with internal waste disposal; Alternative 4) entombment with internal/external waste disposal; Alternative 6) close in place and partially demolish. Alternative 6 was chosen as the preferred alternative, since DOE thinks it provides the best combination of protecting human health and the environment while providing competitive performance in comparison to the other alternatives. Ecology supports the preferred alternative, and community input has been considered in preparing the Proposed Plan and is being sought during the public comment period.

Kevin said that he still needs HAB members to send him questions about barriers for a forthcoming barrier workshop.

Regulator Perspectives

Craig Cameron, EPA, said that an assessment supporting a treatability variance has been performed for some waste constituents. Also, since an alternative design without a traditional liner is being used, leachate removal cannot be performed. Therefore, a CERCLA waiver is being done for the portion of the applicable or relevant and appropriate requirements (ARAR) pertaining to leachate detection. EPA Region 10 has been reluctant to do these waivers in the past consider this waiver to only apply to this

specific situation. Resource Conservation & Recovery Act (RCRA) landfill technical standards are being met.

Rick Bond, Ecology, commented that although the ARAR might be waived in this instance, Ecology does not want to set a precedent for all ARARs. He also mentioned that the State fully supports the proposed alternative.

Committee Discussion

- *Shelley asked how long-term is defined regarding the Proposed Plan?* Kevin responded that a 1,000-year analysis was done with a 500-year cap replacement factored in. Craig Cameron, EPA, added that a 30-year analysis (for liner equivalency) is the same as considering the lifespan of a liner in a landfill disposal facility.
- Kevin said that the inspector general criticized DOE for not examining waste disposal options in the canyons. This would require 500 or 1,000-year analyses to determine what kind of waste could be placed there.
- Wade said that DOE is looking at the 221-U Facility as a complete structure, but that it is really a segmented facility and should be evaluated as such.
- *Rob asked why DOE was not permitting the site as a waste site?* Craig Cameron, EPA, responded that the Environmental Remediation Disposal Facility (ERDF) has not been permitted as a waste site, but that the site is meeting the technical standards for a landfill. Since CERCLA criteria are being used, permits are not required. Rob further asserted that DOE needs to be above board in dealing with these sites, since these decisions will leave a legacy of how to deal with waste. Dennis, EPA, said that it is not palatable to permit the site as a waste site, because it could then be opened up to off-site waste disposal.
- *Steve White asked if the material and debris in the buildings could be used as part of the fill for the building?* Kevin responded that if it were clean enough it could be put up against the building walls and may limit the amount of fill required for the facility. A full evaluation of waste sites will be done before filling and capping.
- *Wade asked what DOE is planning on doing with the sand filter?* Kevin said that it is not currently being D&D'd, but that it will be addressed. It is a gap that has not been addressed yet. The pipeline EE/CA has been initiated under pressure from the State.
- *Dick pointed out the large discrepancy in the doses to all workers over the duration of the activities between Alternative 1 and the other alternatives, and asked how cutting and compacting of all cells to make space for other debris in the preferred alternative is going to happen without getting some of the same doses that are evident in Alternative 1?* Kevin said that the feasibility study deals with those issues.
- *Keith Smith mentioned that there are two methods of using grout: 1) waste mixed, and 2) capped.* Kevin said that DOE is doing both, grouting the material and the building. It is possible to mix it with the clays mixed in to provide a redundancy of barriers.

- *Shelley asked if surveillance and monitoring are addressed in the Proposed Plan?* Kevin said that surveillance is part of building surveillance, monitoring is part of an integrated effort between groundwater and soil monitoring. There was a Data Quality Objectives (DQO) workshop in October to determine what kind of vadose zone monitoring for waste site caps makes sense.
- Susan clarified that whatever waste is generated from D&D on the site would be disposed of on site. Pointing out the difference in exposure between the preferred alternative and the other alternatives, Susan said that since the discrepancy can be attributed to the movement and exposure of waste, it can be communicated to the public that the preferred alternative is at least as effective in terms of exposure as if the site was dug up and disposed of in ERDF.
- *Dirk pointed out that RCRA liners are not designed and engineered for performance, so the site cannot be permitted without installation of a liner. Craig, EPA, responded that the design for the preferred alternative meets RCRA standards, and a concrete liner is being used. Dirk explained that there are problems associated with the design, because it deals with the site as one structure rather than the 13 structures that actually compose it*. He felt that it is important to know how much material is in all the structures. Craig said that the waste is in stainless steel containers, so the estimate of material is fairly conservative.
- *Gerry asked if there has been an examination of cumulative use of land area if this alternative is implemented?* Kevin, DOE-RL, said that such an examination has not been done, and that DOE is trying to maintain flexibility for the future. Gerry responded that DOE cannot wait on information on cumulative land use impacts if this site is to be the model for how remediation for the next several canyons will be done.
- *Gerry pointed out that there are several areas with hold-up chemicals and asked if DOE plans to treat those chemicals that would not be accepted under land disposal regulations (LDR)?* Craig replied that the project plans to macro-encapsulate the area, surrounding waste from all sides, and feels that treatment of the site is appropriate. *Gerry asked if specific chemicals identified would be documented, so that one can look for chemical compositions that are known to be combustible or unstable?* Craig said that specific chemicals would be identified to account for this concern.
- *Shelley asked how many of these potentially volatile chemical compositions there are thought to be?* Craig responded that mercury is the only known chemical that has been identified, and that modeling is being used to address PCBs from a risk-based approach. He also said that there will be monitoring wells as part of the integrated system for cap monitoring, which will ensure that such compositions are detected.
- *Madeleine asked how this plan is a prototype, and if it is merely a procedural document?* Kevin said that there will be some integration of RCRA and CERCLA, and that there will be some precedence setting. On February 1-3, people from Savannah River are invited to come out to look at what DOE is doing at the Hanford site as a means of sharing information and providing lessons learned. Wade pointed out that a barrier being placed over an elevated structure is precedent setting. It is also

the highest waste disposal design to date. Craig and Kevin both indicated that slope stability will be the largest issue, and that other waste sites will provide insight for application to the canyon project. Gerry commented that it would be a good idea to indicate the height differences between the structures in the maps of the alternatives.

- *Rob said that he continues to support a more formalized effort to consider this site a waste facility, especially considering concerns that there are going to be confined spaces in the building where air and water can be trapped and gases can form.* Kevin said that extensive studies of engineering issues, including potential void spaces in buildings, will account for many of these concerns.
- *Dirk asked if DOE is looking at directional drilling?* Craig said that the project does not anticipate having to deal with typical landfill systems, like leak detection, since a liner is not being used. Kevin added that the performance monitoring of caps will address potential leak issues. Dirk stated that due to issues with lateral transport, leak detection has to be considered. Kevin explained that lateral transfer issues will not likely be a significant issue, since leaking from lateral sources would require a significant discharge well in excess of natural precipitation levels.
- Penny suggested that the committee needs to organize itself to look at what is in the plan, and to bring thoughts to the HAB as a way to look at issues in the Central Plateau. She referred the committee to several framing questions in the agenda provided to help think about examining the plan. Using the white paper provided (handed out during meeting), the committee will find many good policy points that are useful for approaching policy issues, and therefore helpful for the HAB to consider when developing its values and coming up with a decision tree. Issue managers will look at the plan and analyze to pull out technical and policy issues that can be brought to the committee and then to the HAB.
- Susan indicated that Dick and Rob will provide technical assessment, and Susan and Shelley will look at it from a policy standpoint. It will take several weeks to get the technical part done for handoff for the policy review. Therefore, they will start looking at the policy issues now. Other committee members that have policy and technical issues should provide thoughts to the appropriate issue managers, who will be prepared to provide feedback to RAP during the January committee meeting.

Integrated Disposal Facility

Delmar Noyes, DOE-ORP, presented an update on the status of the Integrated Disposal Facility (IDF) to the committee. The RCRA Part B Application was submitted in compliance with TPA Milestone M-20-57 in June 2003. In May 2004, the application was revised to reflect comments from Ecology. In June 2004, the Hanford Site Solid Waste Environmental Impact Statement (HSW-EIS) Record of Decision was issued. In September 2004, Benton County elected not to enter into the Citizen/Proponent Negotiation Process after assessing public opinion through a public meeting. In September 2004, the first temporary authorization request for rough excavation was approved. In October 2004, the secondary temporary authorization request for construction of ancillary structures was denied. The overview of site preparation and

construction status indicated that the site is designed for 900,000m^3 of space, with current construction of two cells at 81,500m^3 per cell. The design and construction of the site was a collective effort between EPA, DOE-RL, DOE-ORP, and others.

Regulator Perspective

Suzanne Dahl, Ecology, stated that some stakeholders have said that DOE should only build a facility that accommodates current waste disposal needs. Between now and 2013, with current waste production levels, current capacity would be exceeded, but the overall capacity of IDF (900,000m^3) is enough to accommodate that waste load.

Committee Discussion

- Howard Gnann, DOE-ORP, commented that he thinks it is important to educate people that the current IDF cells being permitted do not provide enough space for all on-site waste disposal, but is still a valuable facility. Shelley said that she was under the impression that IDF was large enough to hold on-site waste, and asked for some volume estimates. Delmar responded that the site was designed for 900,000m^3, which could cover disposal needs, but only 160,000m^3 of volume is currently being permitted for construction.
- *Maynard asked how long it would be until the two cells being constructed are filled?* Rich Raymond, DOE-ORP, said that it depends on how fast the Low Level Waste (LLW) is disposed in lined trenches. IDF cells provide sufficient space and time for expansion when it is needed.
- *Pam asked about permitting of the facility.* Suzanne indicated that there were some issues with State Environmental Protection Act (SEPA) coverage in the HSW-EIS, and that a permit cannot be issued until the appropriate SEPA coverage is obtained. A permit may be issued on December 9. Howard added that DOE continues to talk with Ecology to make progress.
- *Dirk asked what happens if the project gets into the permit process and it is determined that it is better sited in soils in a different area, like 200 West?* Suzanne responded that the HSW-EIS was clear in the information that it provided in terms of location. *Dirk asked whether the 200 East area would actually work better due to greater flux in groundwater?* Suzanne said that more waste could be put in the 200 East area than in the 200 West area, because the higher groundwater activity provides increased dilution.
- *Susan asked which ancillary structures were mentioned in the secondary temporary authorization, which was denied in October? Does that denial impact the timeframe of the project?* Delmar and Howard said the denial does not impact the timeframe of the project, and that the goal is to have a full permit by March.
- *Harold asked what else, besides permits, has to happen for construction to start?* Howard said that permitting is primarily all that has to happen to enable construction to begin, and that DOE has not cancelled any contracts to date.

- *Dick asked if there were any potential "show-stoppers?"* Howard said that there is some potential for that if the SEPA issues cannot be resolved.
- *Shelley asked how many jobs have been impacted at this point?* Delmar and Howard indicated that roughly 30 jobs have been impacted at this point.
- Gerry commented that going back a year ago, stakeholders commented that a determination of non-significance might not be able to be issued at all if the HSW-EIS is determined to be inadequate. There has been a lack of notice on this construction project coupled with lots of public concern. He said that it is clear that the size of the total facility (900,000m^3) exceeds the current need and it appears that cumulative impacts are not being considered in the current permit application. According to NEPA, cumulative impacts are not to be piecemealed out in separate plans. Furthermore, he said that Phase 1 of 160,000m^3 is greater than needed capacity for LLW for 10 years. The cumulative impacts of the proposal have to be considered.
- Suzanne said that IDF brings with it an inherent need to follow the schedule of one of the waste streams, either LLW or immobilized low activity waste (ILAW). Gerry suggested that there might be an avenue around the DNS, like a mitigated DNS that states DOE will not accept off-site waste or ILAW until the court case is resolved. Suzanne reiterated that adequate SEPA coverage is necessary to proceed.
- *Gerry asked why the cells have to be the same size?* Rich said that they do not have to be the same size, and the centerline can be moved to expand one cell and not the other. There is a lot of flexibility built into the project design.
- Gerry said he sees a few main issues: 1) There are issues regarding notice for similar actions in the future; 2) The issue of total capacity of the proposal and measuring cumulative impacts, to improve the accuracy of the EIS; 3) Rationale for Phase 1 (How will the state, or can the state, do anything?). Susan restated Gerry's concerns: Don't build it too fast, too big, and be sure to fill it with on-site waste or it might possibly be used for off-site waste.
- Howard said that he would like to have RAP's position on the project. Considering the permitting and siting issues, does the HAB believe that IDF is the right thing to do?
- *Greg asked whether new technology or thinking on liners has impacted how Ecology looks at landfills?* Laura Cusak, Ecology, responded that once a cap is in place, a liner is not needed, so the fact that a leachate liner will fail does not matter as much.
- *Dirk said that IDF is sited close to the vadose zone observatory, which shows that there is a lot of lateral transport in this zone. He asked whether the engineering design incorporates horizontal walls to mitigate lateral transport?* Suzanne believes that the design includes current modeling to account for those issues. Rick Bond said that the modeling includes the latest information for the vadose zone test site. Dick Smith added that the wide vertical spread event was the result of a large amount of water being dumped, which saturated the soil at a rate faster than the infiltration rate. He suggested that a natural precipitation event would not come close to a discharge of that magnitude.

- *Rob asked if any of the engineering design materials have a shelf life?* Keith said it was a good question since old burial grounds have holes caused by worn out materials. Delmar and Rich said that all aspects of the project are modeled with a lifetime for materials, including caps, liners, etc, figured in.
- *Susan reminded RAP that the HAB has been concerned with cumulative effects over time, and asked if the assumption can be made that if Ecology approved IDF cell by cell, they would look at the cumulative impacts of the entire facility? In other words, would Ecology ensure that each permit is not independent of other permits?*
- *Pam asked that considering the legal and political issues, is there any advice that Ecology would like to see from the HAB?* Suzanne said that it is clear that a landfill is needed to deal with TPA requirements regarding ILAW. She believes the location is correct for IDF. Laura agreed that a landfill is needed and that the analysis that was performed identified the best location for the facility. However if the HAB feels otherwise, then Ecology would like to hear their thoughts.
- *Pam summarized Gerry's concern: What type of waste is going into IDF? What should the size of the facility be?* She said that she was not sure that HAB advice on the issue would be timely, but perhaps the discussion at this meeting has been helpful. Gerry followed up, saying that DOE has an avenue to move forward on the issue, that the HAB should ask why the design is for 900,000m^3 of capacity, and that the cumulative effects need to be examined.
- Maynard stated that DOE providing IDF information to RAP and the HAB may be their effort to provide advance information, and said that it would not be good to hold up progress unnecessarily at this point.
- Harold said that it would be a good idea to pull together past HAB advice on the IDF issue, and see what has been said, which will provide a foundation for moving forward. He suggested developing five or six questions based on RAP's discussion, ask for responses, and try to come to an agreement. Pam asked committee members to send questions to EnviroIssues for a discussion at the January meeting.
- Dennis commented that this process is reminiscent of ERDF: It is a very important public policy decision, and the state and DOE want to make a sustainable decision. Establishing comfort among groups is important, and should receive the same level of HAB attention.

Transuranic Waste (TRU) Issues

Dennis presented to the committee on issues relating to TRU, specifically the recent events surrounding problems with characterization of TRU waste transported to the Waste Isolation Pilot Plant (WIPP). He said that Hanford did nothing wrong in the process, but the situation raised the need to make sure that EPA is reading certification papers and following proper procedures. Carlsbad told Hanford that the solid waste stream being transported was certified, and that it should be sent along. However, the waste stream was not certified by EPA and needed to be.

Committee Discussion

- *Shelley asked if there are now processes in place that ensure that such problems and oversight does not occur in the future?* Dennis said that DOE and EPA are taking the WIPP certification process very seriously so that it does not happen again. He informed the committee that the generator of the waste is always responsible.
- *Maynard asked how DOE and EPA are certain that this will not happen again?* Dennis said that he cannot provide an answer, but that it would be a valid question for DOE to answer, and it would be worth having DOE provide RAP with an understanding of the process. Nick Ceto, EPA, was identified as the person that should be the lead on this issue.
- Julie Atwood, Bechtel Hanford, Inc. (BHI), said that she is involved with working out a cross-regulatory approach for non-TRU waste fraction that is generated out of the TRU retrieval program. The fraction of waste characterized as non-TRU is being put through the ERDF waste acceptance criteria and performance assessment, and there is a 100 nano curies per gram limit. Dennis added that there is some waste that is in "no-man's land," above ERDF waste acceptance criteria (WAC) limit, but below the TRU WAC.
- *Dick clarified that waste comes out of the ground and goes through a waste acceptance process, and asked what is the basis for TRU level count (waste, container, other material used to treat waste, etc.)? Will the addition of other material cause calculated weight of waste to be non-TRU? Essentially how does one make sure that the waste stream is not being diluted?* Julie, BHI, said that one needs to look at the configuration of the package, not the amount of each component.
- Gerry presented information based on a Heart of America (HOA) report on unaccounted TRU waste to the committee. One of the main concerns of the report is with identifying pre-1970 TRU. He brought up two issues from the report: 1) What is being done to track TRU and how accurate is it? and 2) A DOE 2000 report on buried TRU revealed that there is a large quantity of mostly pre-1970 TRU in the soil at Hanford, several times more than TPA allows for transfer to WIPP. By his estimation, 152,800m^3 of TRU waste is unaccounted for and seven times more TRU was admitted to be in Hanford's soil in DOE 2000 report than was included in the official 2004 Solid Waste Forecast.
- Heart of America issued seven major recommendations, which Gerry wants to discuss having the HAB adopt during the next board meeting:
    1. TRU waste retrieved from soil needs to be treated.
    2. Develop a schedule for investigation of burial grounds for retrieval of TRU.
    3. If more than half of TRU that is licensed for WIPP is at Hanford, a discussion is needed since there is not currently a facility to handle that amount of waste
    4. Regulators need to come up with data quality standards and assurances.

5. M-91 should be revised along with all TRU and shipment off-site .
6. Full estimated volume of TRU should be retrieved.
7. HSW-EIS should be revised to show full cumulative impacts of the missing TRU.

- Dennis indicated that this is a large public policy issue, and that DOE's policy is to not remove pre-1970 TRU. If it is dug up, does WIPP have the capacity to handle the waste? The baseline is to leave it in the ground. Is that a good policy? Laura expressed the need to do more analysis to determine how much TRU should come out of the ground. She said that figures change when assumptions change. It would be good to bring in DOE to present the numbers to the committee if the HAB is going to issue advice on the topic. Ecology uses information by assessing and evaluating assumptions, so in considering advice, RAP would need to digest lots of information and bring in agencies to help understand the issues.
- Pam reminded the committee that at the leadership retreat, the HAB decided that TRU was a necessary issue that will require attention from the HAB. Susan expressed a need to schedule two or three hours of discussion at the next RAP meeting.
- Penny mentioned that capping is another issue for the January meeting. She asked the committee which topic was more pressing? There was committee consensus to move the TRU discussion to the February meeting.
- Dennis suggested the development of a sub-group to work with agencies to determine the right questions. Pam called for volunteers, and Rick Jansons, Gerry Pollet, Susan Leckband, and Maynard Plahuta said they would.
- Rick stated his desire to see the HAB work on a piece of advice addressing the recently threatened work furloughs associated with I-297. At the next RAP meeting Rick will provide a draft advice piece on furloughs.

Committee Work Plan

- Penny presented the work plan table to the committee to identify issues being worked on issue managers were assigned to head-up work efforts. Penny will work with the agencies to identify the agency leads for each issue.

Name of Issue	Issue Manager Lead	Other interested issue managers	Crosscutting committee(s)	Agency leads (work through facilitation & public involvement staff)
Transuranic Waste (TRU)	Rick Jansons	Gerry Pollet, Susan Leckband, Maynard Plahuta		
Canyon Disposition Initiative (CDI) / U-Plant	Dick Smith (technical) Susan Leckband (policy)	Shelley Cimon Rob Davis	Public Involvement Committee (PIC)	

Name of Issue	Issue Manager Lead	Other interested issue managers	Crosscutting committee(s)	Agency leads (work through facilitation & public involvement staff)
Groundwater	Maynard Plahuta	Wade Riggsbee, Tm Stoops		
Central Plateau	Pam Larsen	Susan Leckband, Shelley Cimon	Budgets and Contracts Committee	
K-Basin Sludge	Harold Heacock			
Long-Term Stewardship (LTS)	Susan Leckband	Helen Wheatley		
Purex Tunnels	Keith Smith			
Risk-Based End States	Pam Larsen	Shelley Cimon, Ken Niles, Susan Leckband, Maynard Plahuta		
Caps / Engineered Barriers	Rob Davis	Gerry Pollet, Pam Larsen		
618-10/-11				
Plutonium Finishing Plant (PFP)				
Interagency Management Integration Team (IAMIT)	Shelley Cimon	Dick Smith		

Committee Business

- Pam asked about Inter Agency Management Integration Team (IAMIT) meetings. Susan asked if it is a concern that IAMIT is pulling away efforts to help. Shelley said that she would check on the issue.
- Pam and Penny identified topics for the next meeting:
    1. Call with Kevin and Craig on capping
    2. Caps discussion – Susan, Gerry, and Rob will help frame
    3. U-Plant workshop for RAP, which should be more detailed than the eventual workshop for the HAB.
    4. IDF
    5. TRU (February meeting)

- Penny asked if RAP needed a call next week? The general consensus was that a call was needed.

Handouts

- Section 2 – Hanford Decision Process, section from *Community Relations Plan for the Hanford Federal Facility Agreement and Consent Order*, January 2002.
- CERCLA Decommissioning (Engineering Evaluation/Cost Analysis, Non Tri-Party Agreement), Cliff Clark, DOE, 2004.
- Proposed Plan for the 221-U Facility: Presentation to Hanford Advisory Board, River and Plateau Committee, Kevin Leary, DOE, 12/6/04.
- Proposed Plan for Remediation of the 221-U Facility (Canyon Disposition Initiative), DOE, November 2004.
- Alternatives Evaluated for the 221-U Facility (Canyon Disposition Initiative) – fact sheet, DOE, Washington State Department of Ecology, and EPA, 2004.
- Framing of Issues Disposition of Canyon Facilities Prepared by EnviroIssues For Hanford Advisory Board, EnviroIssues, July 11, 1997.
- 2004 Meetings and Public Comment Periods Timeline, 12/6/04.
- Integrated Disposal Facility, DOE-ORP, 12/6/04.
- Memorandum: Policy on Decommissioning Department of Energy Facilities Under CERCLA, EPA, May 22, 1995.
- Letter: To Frank Macinowski, Deputy Assistant Secretary, Logistics and Waste Disposition Enhancements, DOE, 11/12/04.
- "Transuranic Waste at Hanford: Large Quantities Lost" USDOE's Plans Increase Waste and Risk, While Ignoring Buried Wastes Spreading Contamination Executive Summary, Heart of America, 12/6/04.
- River and Plateau Committee Work Planning Table, EnviroIssues, 2/12/03.

Attendees

HAB Members and Alternates

Shelley Cimon	George Jansen	Mike Priddy
Madeleine Brown	Rick Jansons	Wade Riggsbee
Greg de Bruler (by phone)	Pam Larsen	Dick Smith
Rob Davis	Susan Leckband	Keith Smith
Dirk Dunning (by phone)	Nancy Murray (by phone)	Tom Stoops (by phone)
Gariann Gelston	Maynard Plahuta	Leon Swenson
Harold Heacock	Gerry Pollet	Steve White

Others

Cliff Clark, DOE-RL	Rick Bond, Ecology	Julie Atwood, BHI
Kevin Leary, DOE-RL	Laura Cusack, Ecology	Todd Nelson, BHI
Joe Voice, DOE-RL	Suzanne Dahl, Ecology	Brian Kidder, CHG
		Rick Raymond, CHG
Howard Gnann, DOE-ORP	Craig Cameron, EPA	Penny Mabie, EnviroIssues
Delmar Noyes, DOE-ORP	Dennis Faulk, EPA	Jason Mulvihill-Kuntz,

		EnviroIssues
Rick Raymond, DOE-ORP	Mike Goldstein, EPA	Theresa Bergman, FH
		Lanny Dusek, FH
		Mark Gibson, FH
		Ron Jack, FH
		Mike Lackey, FH
		Barbara Wise, FH
		Kim Ballinger, Nuvotec/ORP
		Sharon Braswell, Nuvotec/ORP